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Product datasheet for AP20955PU-N

JAK1 pTyr1022 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC
Recommended Dilution:	Western blot: 1:500 - 1:1000. Immunohistochemistry on paraffin sections: 1:50 - 1:200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of p-JAK1 (pTyr1022)protein.
Formulation:	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.2 State: Aff - Purified State: Liquid Ig fraction
Concentration:	1.0 mg/ml
Purification:	Affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen, purity is > 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store at 2 - 8 °C for up to one month or (in aliquots) at -20 °C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	Janus kinase 1
Database Link:	Entrez Gene 16451 MouseEntrez Gene 84598 RatEntrez Gene 3716 Human P23458

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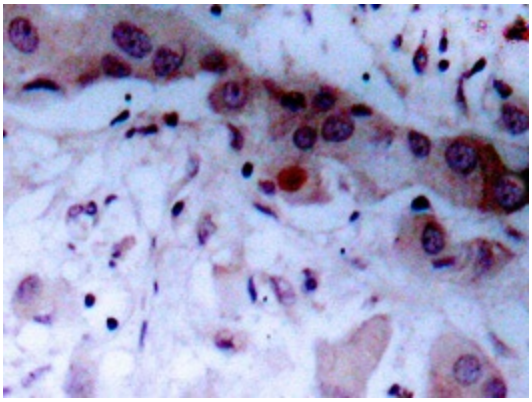
Background: JAK1 (Janus kinase 1) belongs to the family of non-receptor Janus tyrosine kinases, which regulate a spectrum of cellular functions downstream of activated cytokine receptors in the lympho-hematopoietic system. Immunological stimuli, such as interferons and cytokines, induce recruitment of Stat transcription factors to cytokine receptor-associated JAK1. JAK1 then phosphorylates proximal Stat factors, which subsequently dimerize, translocate to the nucleus and bind to cis elements upstream of target gene promoters to regulate transcription. Upon ligand binding, JAK1 undergoes tyrosine phosphorylation and catalytic activation in an interdependent manner. Phosphorylation of tyrosine residues at positions 1022 and 1023 is believed to function in the activation of catalytic events. The canonical JAK/Stat pathway is integral to maintaining a normal immune system by stimulating proliferation, differentiation, survival and host resistance to pathogens. Altering JAK/Stat signaling to reduce cytokine induced pro-inflammatory responses represents an attractive target for anti-inflammatory therapies.

Synonyms: Janus kinase 1, JAK-1, JAK1A, JAK1B

Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: Jak-STAT signaling pathway, Pancreatic cancer, Pathways in cancer

Product images:



Immunohistochemistry with AP20955PU-N antibody in paraffin-embedded human breast carcinoma tissue.